EXHIBIT 2

From:	Kanter, Jonathan S <jkanter@paulweiss.com>
Sent:	Thursday, September 12, 2019 12:25 PM
To:	Karr, Ryan (ATR) <Ryan.Karr@ATR.USDOJ.GOV>
Cc:	Musah, Ocasha <omusah@paulweiss.com>; Kressin, Brandon <bkressin@paulweiss.com>
Subject:	Deck
Attach:	DOJ Final Presentation (9.12.19).pdf

Hi, Ryan. Attached is the deck for today's presentation. We will bring hard copies for the room.   I suspect we will need a full two hours if you and you team have the availability.

Best,
Jonathan

Jonathan S. Kanter | Partner
Paul, Weiss, Rifkind, Wharton & Garrison LLP
2001 K Street, NW | Washington, DC 20006-1047
+1 202 223 7317 (Direct Phone) | +1 202 204 7359 (Direct Fax)
jkanter@paulweiss.com | www.paulweiss.com

This message is intended only for the use of the Addressee and may contain information that is privileged and confidential. If you are not the intended recipient, you are hereby notified that any dissemination of this communication is strictly prohibited. If you have received this communication in error, please erase all copies of the message and its attachments and notify us immediately.

rubicon
P R O J E C T

Google's Ad Tech Monopolization Toolbox
September 12, 2019

Confidential

INTRODUCTION

RUBICON PROJECT, GOOGLE & AD TECH

Confidential - The Rubicon Project, Inc. 2019

2

RUBICON PROJECT

WHO WE ARE

Founded in 2007, Rubicon Project was an early innovator of much of the technology that is now used to automate the buying and selling of digital ads

rubicon
PROJECT

Automation. Transparency. Standards.

Rubicon Project

Rubicon Project operates one of the leading digital ad exchanges—an online marketplace that lets advertisers bid on and purchase digital ad impression in real time. Our goal is to be a neutral technology for buyers and sellers to transact, based on open-source technology and transparency.

Confidential - The Rubicon Project, Inc. 2019

3

Prebid.Org: An Industry Effort

rubicon PROJECT

Prebid.org is an independent organization designed to promote fair, transparent, and efficient header bidding across the industry. It is open to all companies who are part of the programmatic ecosystem to work to standardize specific tools and systems related header bidding technologies.

Open Source Projects

Prebid.js	Prebid Tools	Prebid Mobile	Prebid Server

Prebid Video	Prebid Native
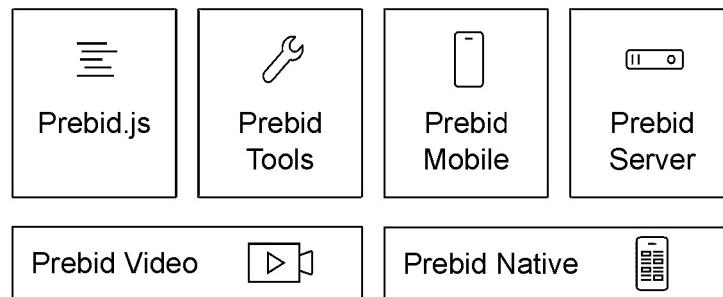
Prebid Events

Prebid Leadership Summit NYC

Prebid Leadership Summit London

Prebid.org Members

rubicon PROJECT — OpenX — criteo — Oath: A Verizon company — PubNative — MEDIAVINE

AppNexus A Xaxar Company — PubMatic — sortable — cafe media — Browsi

4

Google Dominates All Areas of Ad Tech
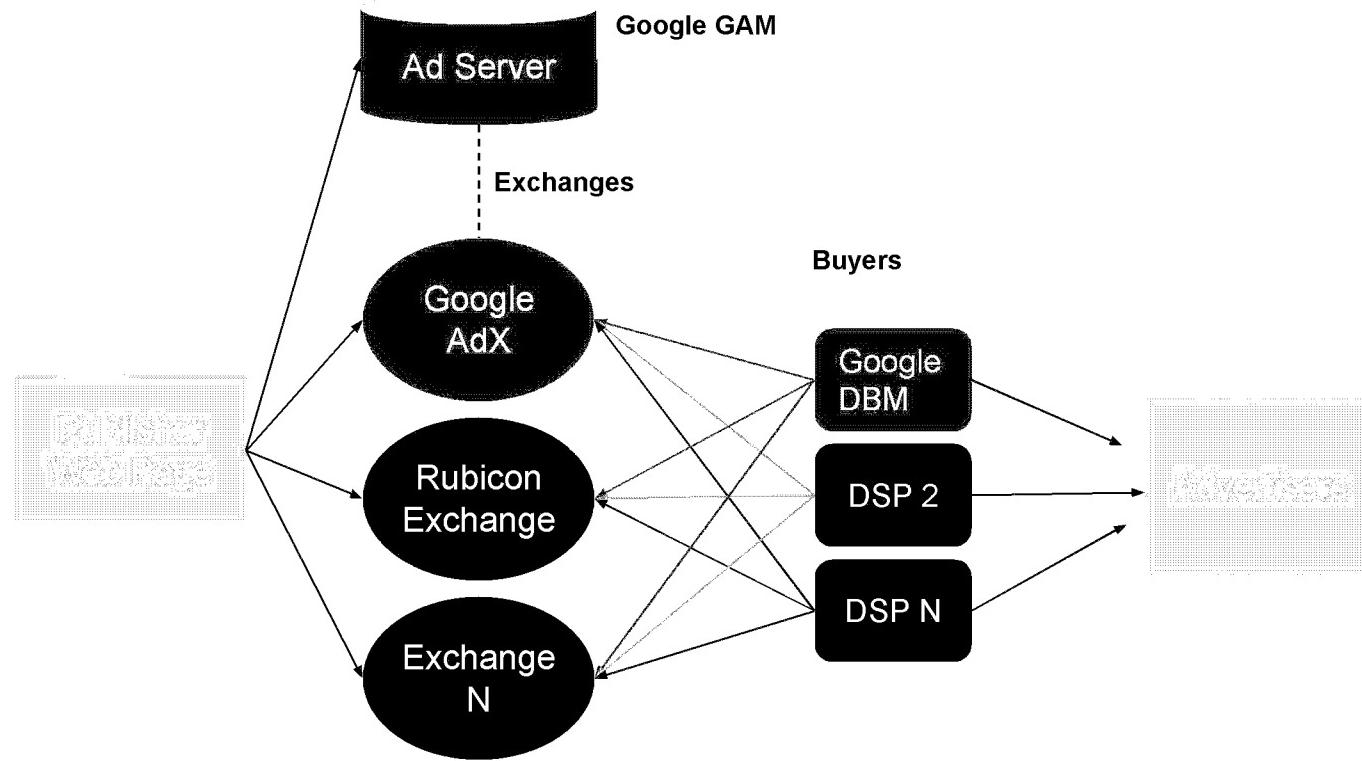
Google has a monopoly position -- and they are using it

Google controls every layer of the Ad Tech ecosystem. They dominate key areas of **owned and operated content (O&O)**, and they have #1 positions on both **Buy** and **Sell** side. They literally decide who wins and loses. They exert their pressure in four key areas:

1. Google's dominant O&O (e.g., mail, maps) squeezes out independent platforms

2. Google uses its ad server monopoly to advantage its exchange and exclude rivals

3. Google uses its market power with buyers to direct demand through its exchange and exclude rivals

4. Google effectively promotes latency in interconnecting with other platforms, and is trying to force ad tech platforms to use its Cloud services in order to reduce latency and win auctions -- a $25M-$50M a year problem for exchanges like ours

Confidential - The Rubicon Project, Inc. 2019

6

TOOLS IN GOOGLE'S ANTICOMPETITIVE TOOLBOX:

OWNED & OPERATED INVENTORY

Confidential - The Rubicon Project, Inc. 2019

7

Where It Starts: Google O&O is the Root

Google has a dominant position in Search, Mail, Video, Maps and other areas --
and buyers can only advertise on this content by using Google's adtech platforms.

8
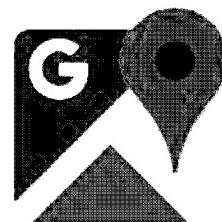
# Search and Maps: Unique Demand For AdX Leads to Control Over Demand

- Google has had monopoly power in Search, Maps and related advertising for over a decade
- Small businesses must place ads on Google search results and Google maps inventory.
- Buyers can only purchase this inventory via Google's own buying platform (Google AdWords) -- no other path
  - Google then offers Display inventory to these advertisers and forces ALL buys through AdX (Google's SSP)
- If a publisher wants demand from AdWords buyers, it must sell inventory via AdX. There is no other option. This forces every publisher to depend on Google for revenue, and reduces the viability of independent parties.

9

Google restricts third-party DSPs' access to YouTube inventory

- YouTube is another key source of ad inventory.
- For years, Google allowed advertisers to purchase ads on YouTube inventory through several different DSPs, which drove up demand
- In 2015, Google began forcing advertisers to use its DSPs, either DoubleClick Bid Manager or AdWords, to buy YouTube ads
- The effect was to drive even more advertiser demand into Google's buy-side ad tech products

Confidential - The Rubicon Project, Inc. 2019

10

YouTube Video Dominance

Advertising Revenue
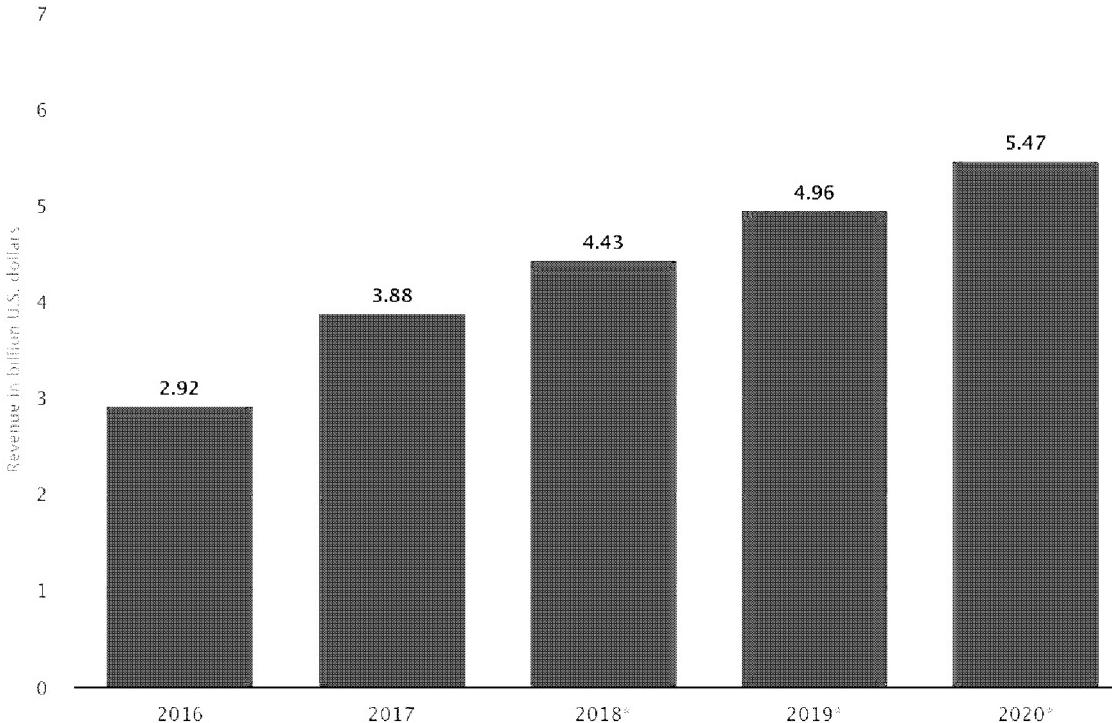
Total Subscribers:

YouTube: 1.5 billion monthly users

Netflix: 118 million monthly viewers

Source: Wall Street Journal

Source: Statista

Confidential - The Rubicon Project, Inc. 2019

11

Google uses user data from its consumer-facing services to power its ad tech products

- Key Google services, such as Gmail, have enormous reach (recent public estimates: 1.5B users have a Gmail account)
- Once users log in to a Google service (or use Chrome or Android), Google can effectively track their activity across the web
- After acquiring DoubleClick, Google promised that it would not use that first-party data to give its ad tech products an anticompetitive advantage
- But in 2016, Google changed its privacy policy to allow it to use data from its first-party services to power its ad tech products.
- Google gives exclusive access to this enormously valuable data to DBM + AdX. If Google cared about advertiser outcomes, it would grant third party access to this data.

Confidential - The Rubicon Project, Inc. 2019

12

Google's Terms of Service

Your Content in our Services

Some of our Services allow you to upload, submit, store, send or receive content. You retain ownership of any intellectual property rights that you hold in that content. In short, what belongs to you stays yours.

Our automated systems analyze your content (including emails) to provide you personally relevant product features, such as customized search results, tailored advertising, and spam and malware detection. This analysis occurs as the content is sent, received, and when it is stored.

If you have a Google Account, we may display your Profile name, Profile photo, and actions you take on Google or on third-party applications connected to your Google Account (such as +1's, reviews you write and comments you post) in our Services, including displaying in ads and other commercial contexts. We will respect the choices you make to limit sharing or visibility settings in your Google Account. For example, you can choose your settings so your name and photo do not appear in an ad.

None of this conduct makes commercial sense absent Google's desire to dominate ad tech

- If not for its ad tech business…

  …Google would have no incentive to funnel search demand into a single ad exchange

  …Google would have no incentive to restrict DSPs' access to its own inventory (Search, Maps, YouTube)

  …Google would have no incentive to use its Gmail terms of service to force consent to use the data on its platform business

  Google exercises its control of owned-and-operated products to bolster its ad tech market power

14

# TOOLS IN GOOGLE'S ANTICOMPETITIVE TOOLBOX:

AD SERVER MONOPOLY

Confidential - The Rubicon Project, Inc. 2019

15

Google dominates the ad server market

- Ad Servers were developed before programmatic technology -- when ads were bought and sold by direct salesforces
- Google later formed an ad exchange when programmatic started -- and coupled the two together tightly

- In a competitive market, ad servers would not discriminate between demand sources—they would choose which channel offers the highest return

- The ad server market, however, is not competitive—Google's DFP enjoys a dominant market position

- Google uses DFP to provide advantages to its own exchange. Result: An overwhelming majority of publisher inventory is sold through AdX, not independent exchanges.

Confidential - The Rubicon Project, Inc. 2019

16

Significant % of Rubicon publishers use DFP

% of 50 Global Premium Publishers

% of Ad Requests from 50 Global Premium Publishers

8%

4%

Uses DFP

Uses DFP & Another Ad Server

Uses Another Ad Server

90%
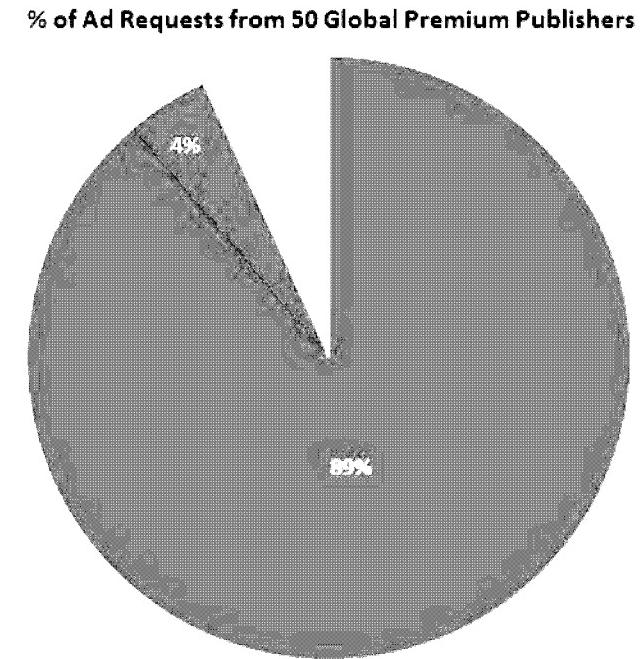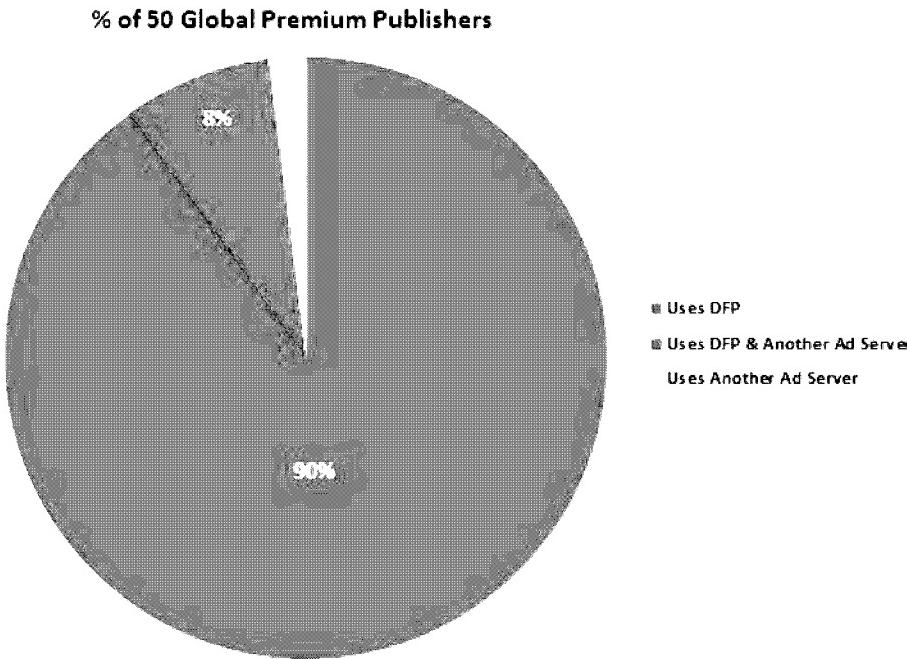
89%

Estimates based on July 2019 metrics, excludes
aggregators and mobile publishers using MoPub (Twitter)

17

Google Ubiquitous in ads.txt Files

EXCHANGES LISTED ON MOST ADS.TXT FILES

AS OF DECEMBER 31 2018 AMONG ALL DOMAINS WITH ADS.TXT
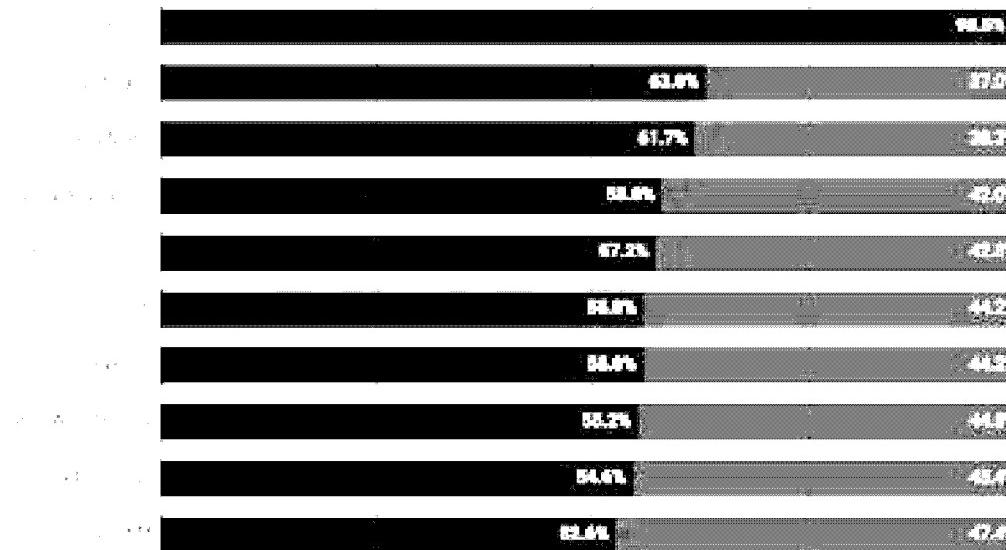
GOOGLE AT 98.5%

Source: Pixalate - Q4 2018 ADS.TXT TRENDS REPORT

18

AdX obtains "last look" on all inventory sold via DFP

- In 2010, Google introduced "Dynamic Allocation" to DFP
- Dynamic Allocation changed the waterfall used by DFP to give Google's ad exchange, AdX, a right of first refusal to submit real-time bids for any remnant ad impression before sending that impression to a different demand source
- Dynamic Allocation disadvantaged other demand sources, and harmed publishers, because it allowed only AdX to use more accurate real-time demand information to win the impression
- After the introduction of Dynamic Allocation, publishers noticed more inventory being channeled into AdX

19

Scale Matters

- Independent exchanges can only address the largest appx 500 publishers
- Google's anticompetitive conduct has prevented independents from growing and investing long tail publishers
- Google prevents its rivals gaining scale, particularly in the long tail and mid market publisher market
- Margins in mid and long tail publishers are double or triple those of Tier 1 publishers (due to lack of competition)

Confidential - The Rubicon Project, Inc. 2019

20

Google then introduced Enhanced Dynamic Allocation, which reached guaranteed inventory

- In 2015, Google introduced "Enhanced" Dynamic Allocation, which allowed AdX to read and outbid even *guaranteed* line items (contracts negotiated directly between publishers and advertisers)
- This "enhancement" strengthened DFP's ability to drive the choicest ad impression inventory to AdX, at the expense of independent adtech companies.

Confidential - The Rubicon Project, Inc. 2019

21

Enhanced Dynamic Allocation Introduced in 2015

2015 Top 20 Publishers: 2015-2016 Ad Spend Change						
	2015 Ad Spend		2016 Ad Spend		2015-2016 Ad Spend Change	
	$M	% Total	$M	% Total	$M	% Change
Publisher 1	$59.7	6.3%	$28.0	2.9%	($31.6)	(53%)
Publisher 2	$38.0	4.0%	$39.5	4.1%	$1.5	4%
Publisher 3	$27.6	2.9%	$18.2	1.9%	($9.4)	(34%)
Publisher 4	$25.7	2.7%	$35.7	3.7%	$10.0	39%
Publisher 5	$22.8	2.4%	$9.7	1.0%	($13.1)	(58%)
Publisher 6	$21.1	2.2%	$18.0	1.9%	($3.2)	(15%)
Publisher 7	$14.8	1.6%	$11.4	1.2%	($3.4)	(23%)
Publisher 8	$14.8	1.6%	$11.1	1.2%	($3.7)	(25%)
Publisher 9	$14.1	1.5%	$23.8	2.5%	$9.7	69%
Publisher 10	$13.7	1.4%	$4.7	0.5%	($8.9)	(65%)
Publisher 11	$13.6	1.4%	$11.4	1.2%	($2.2)	(16%)
Publisher 12	$13.2	1.4%	$6.8	0.7%	($6.4)	(48%)
Publisher 13	$12.4	1.3%	$6.8	0.7%	($5.6)	(45%)
Publisher 14	$11.4	1.2%	$7.9	0.8%	($3.5)	(31%)
Publisher 15	$11.0	1.2%	$6.4	0.7%	($4.6)	(42%)
Publisher 16	$10.9	1.1%	$7.7	0.8%	($3.2)	(29%)
Publisher 17	$10.5	1.1%	$8.8	0.9%	($1.7)	(16%)
Publisher 18	$10.4	1.1%	$8.3	0.9%	($2.1)	(20%)
Publisher 19	$9.8	1.0%	$7.1	0.7%	($2.7)	(27%)
Publisher 20	$8.3	0.9%	$5.4	0.6%	($2.9)	(35%)
Top 20 Subtotal	$363.8	38.4%	$276.8	28.8%	($87.0)	(24%)

2015 Top 20 global publishers

22

Independent AdTech Companies Struggle

AppNexus Lays Off 13% Of Its Workforce In Reorg

by Sarah Sluis // Friday, October 14th, 2016 - 1:03 pm

Ad-Tech Company OpenX Lays Off Around 100 Staff

The company saw platform usage balance back, other invest in areas including mobile video and connected TV advertising

By Ian Cohen

Deloitte.

RUBICON PROJECT LAYS OFF 19%, STILL FEELING THE PAIN FROM HEADER BIDDING

By George Philoliti Reuse December 22, 2016.

PubMatic Lays Off More Than 100, Plans To Refocus On Large Customers

by Sarah Sluis // Tuesday, December 3rd, 2015 - 5:03 pm

Sovrn CEO Explains Why He Laid Off 14% Of Workforce

by Sarah Sluis   //   Tuesday, July 18th, 2017 - 8:00 am

23

# Companies like Rubicon Project developed header bidding as an alternative

- Publishers and ad tech providers started to develop "header bidding" a work-around technology to enable other demand sources to submit real-time bids on remnant ad inventory that DFP, using Dynamic Allocation, might otherwise withhold from the bidding process
- Once the header-bidding auction is over, the winning bid is submitted as the floor to DFP
- However, that meant that Google was still getting a "last look" advantage

Confidential - The Rubicon Project, Inc. 2019

24

Google purported to open up its auction process through Exchange Bidding

- In late 2017, Google announced Exchange Bidding (EB), which it claimed would allow other demand sources to compete with AdX to bid on inventory and thereby reintroduce competition
- But Exchange Bidding still disadvantages other exchanges:
  - **EB bidders see the floors in the ad server. Header bidders bid blind. There is no way to compete on these terms.**
  - Google collects competitively sensitive pricing data from rival exchanges, which it uses to train the algorithms that it uses to determine how much to bid for inventory.
- **Google charges Rubicon Project's publishers 5%-10% to use EB (and obtain responses via third party exchanges). It charges ZERO to use AdX.** In a net bid auction, that means AdX wins most of the time.

25

Meteoric Rise of Google EB

EB Ad Spend - $ and % of Total
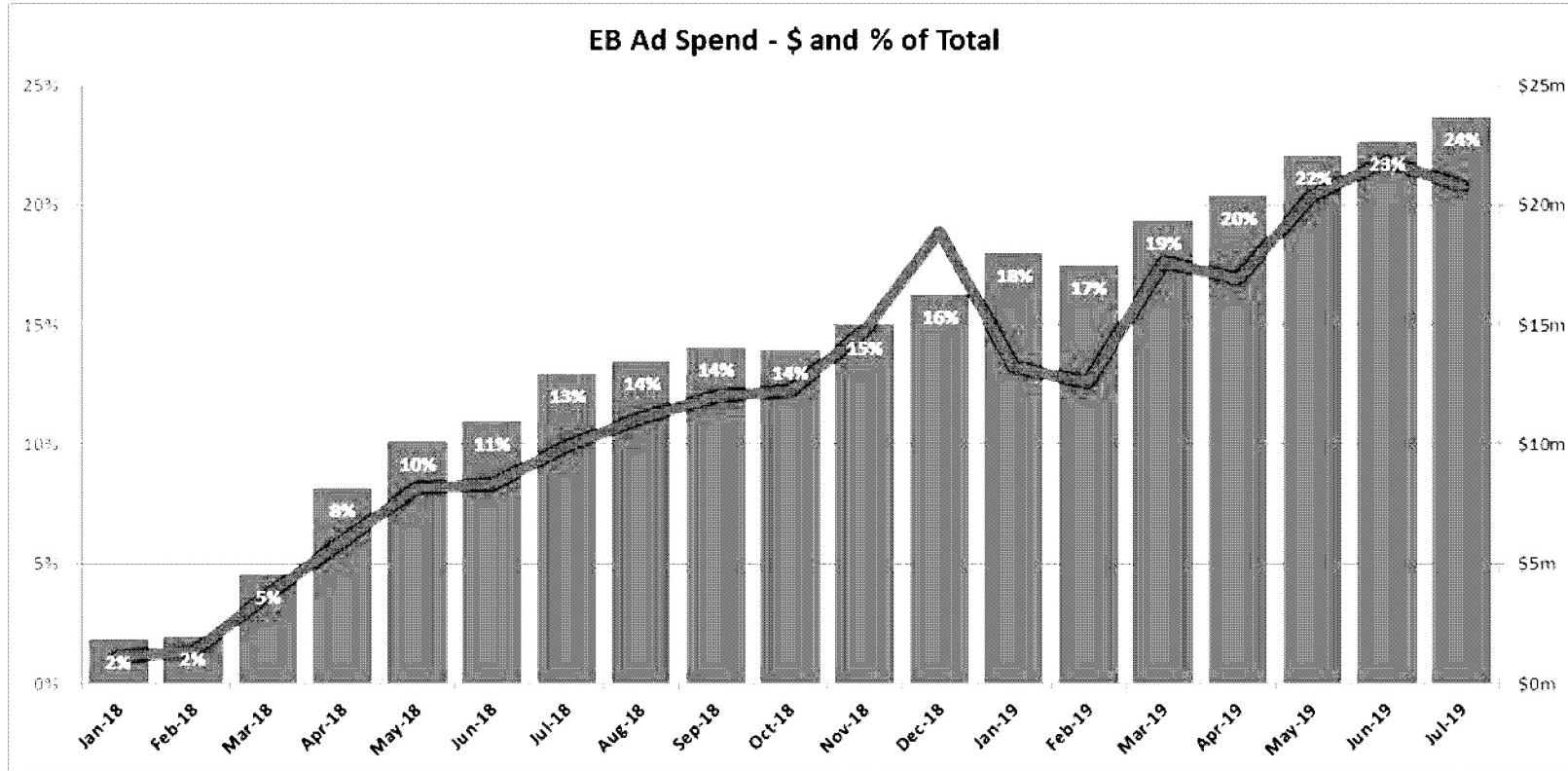
AdX will only compete with other exchanges via EB. AdX will not participate in Prebid.

Confidential - The Rubicon Project, Inc. 2019

26

DBM Relative Spend Goes Down as EB Relative Inventory Goes Up

% Global Ad Spend - DBM Spend & EB Inventory

Confidential - The Rubicon Project, Inc. 2019

27
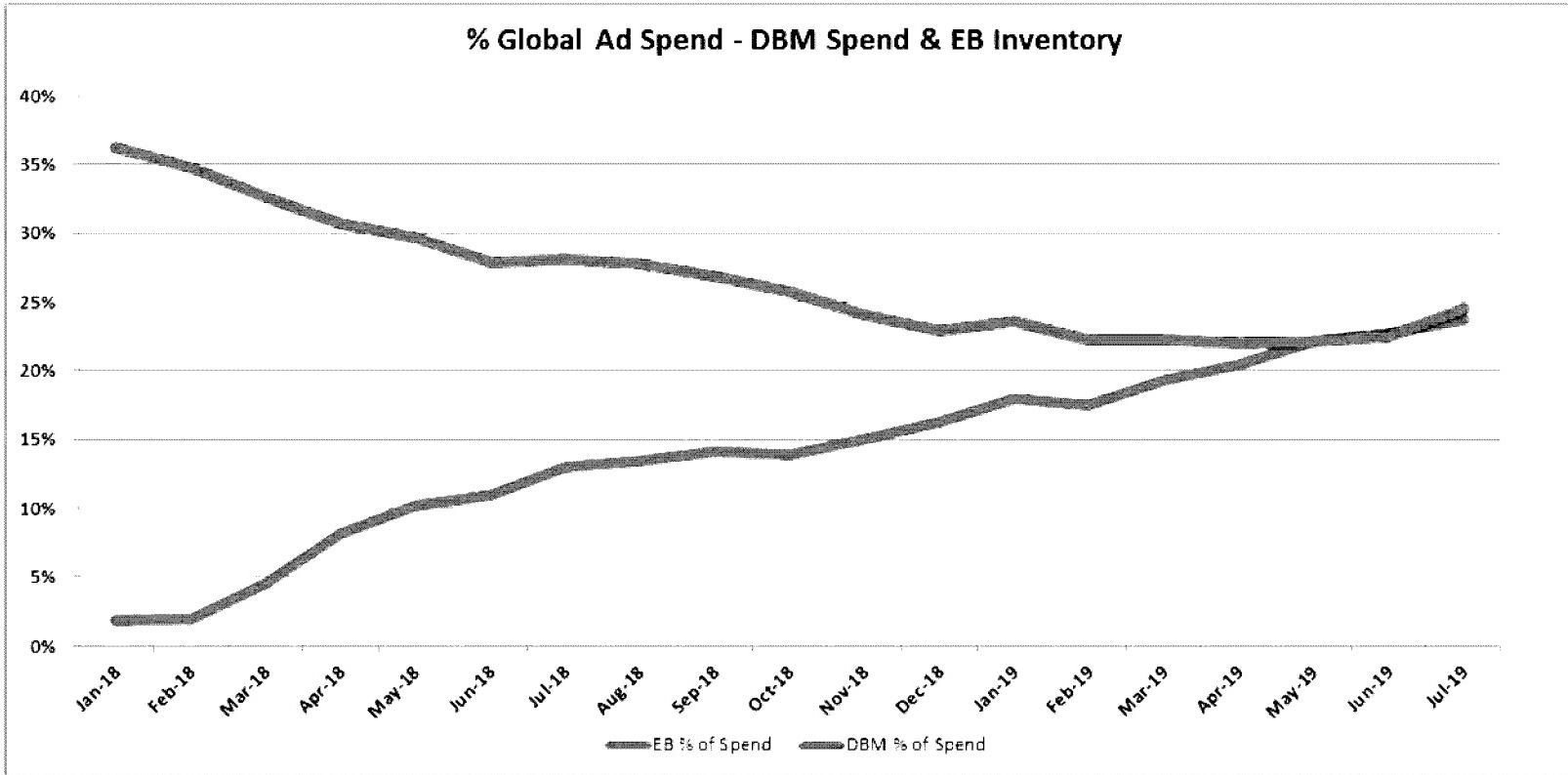
Ad Spend filled by Rubicon Project via EB

Premium Publishers: July 2019 EB % of Total Publisher Ad Spend

Confidential - The Rubicon Project, Inc. 2019

28
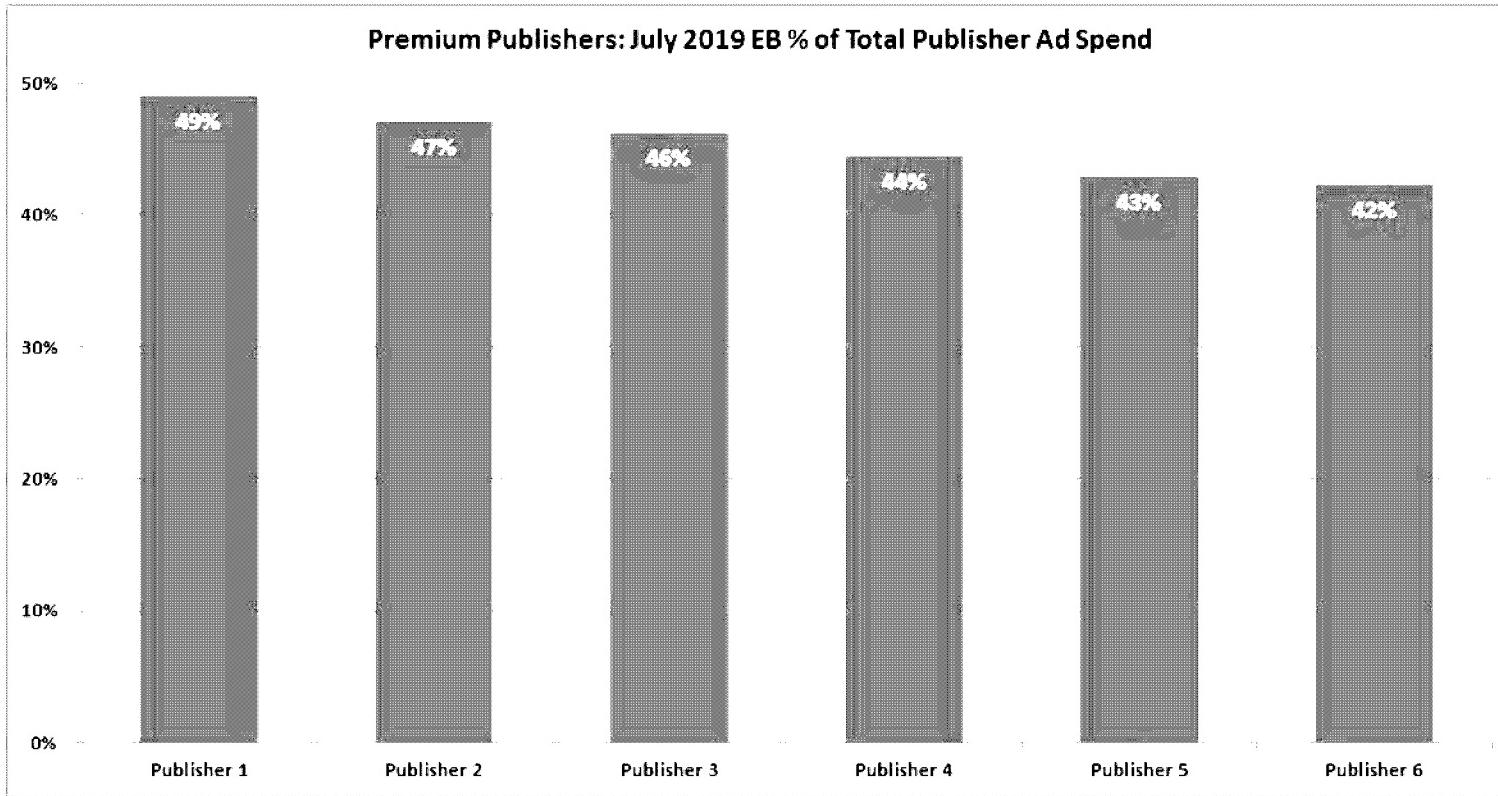
Unified Auction Addresses These Issues….Not

# Unified Auction Introduces Four New "Features"

- Publishers can no longer floor AdX differently than other pubs (benefit: AdX)
- Publishers can only set up 100 rules in GAM (benefit: AdX)
- First Price Auctions (benefit: Neutral)
- Unified Reporting (but no reporting on Adwords)

Only Google receives floors -- Prebid does not

Only Google can set floors -- Prebid can not

Google Reserves Its Highest Priority Deal Classes for Itself ONLY

Deal Classes within GAM/EB/AdX

| GAM/EB/AdX Deal Priority Tiers	
Preferred	← **Access to this class is limited to Google only.** Third party exchanges/prebid DO NOT have access to this class
Private Auction - Unoptimized	← Restricted access to third party exchanges via EB
Private Auction - Optimized	← Restricted access to third party exchanges via EB
Open Auction	← All third party exchanges compete in the lowest tier by default

Confidential - The Rubicon Project, Inc. 2019

30

Sellers.json defines EB as an intermediary

Scenario 1 passthrough from publisher to exchange bidding participant.

Inventory comes from publisher. Exchange participant pays Exchange bidding provider. Exchange bidding provider pays Publisher. (Examples of this scenario are Google Exchange Bidding and Amazon Unified Ad Marketplace.)
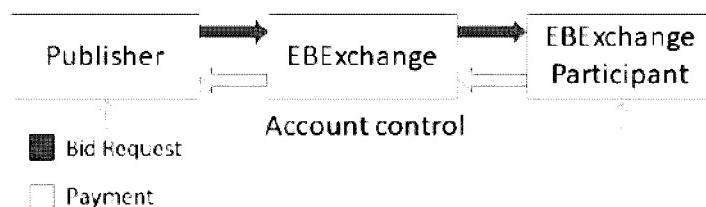
Ads.txt: DIRECT

ebexchange.com/sellers.json:

```
...
"sellers": [
  {
    "seller_id": "pub-0973104593140115",
    "name": "Meredith",
    "seller_type": "PUBLISHER",
    "domain": "meredith.com",
    "is_passthrough": 1,
    "comment": "Must establish account relationship with Meredith to
transact"
  }
  ;
```

ebparticipant.com/sellers.json:

```
...
"sellers": [
  {
    "seller_id": "104144",
    "name": "EB Exchange",
    "seller_type": "INTERMEDIARY",
    "domain": "ebexchange.com",
    "comment": "Meredith via Exchange Bidding"
  }
  ;
  .
...
```

SupplyChain for requests from ebparticipant.com

```
"schain": {
  "ver":"1.0",
  "complete": 1,
  "nodes": [
    {
      "asi":"ebexchange.com",
      "sid":"pub-0973104593140115",
      "hp":1
    },
    {
      "asi":"ebparticipant.com",
      "sid":"104144",
      "hp":1
    }
    ;
    ;
```

Confidential - The Rubicon Project, Inc. 2019

31

Summary

- Google bought the world's largest ad server (DFP) in 2007
- Since then, Google has used its ad server to bolster other parts of its ad tech stack, most notably its ad exchange (AdX)
- Google did not simply tie DFP to AdX—instead Google found ways to incorporate "features" that gave AdX unfair advantages in auctions conducted using DFP
- Over time, Google gradually made accommodations to allow third party exchanges to compete on the margins, but these changes still dramatically favor AdX:
  - **they tax publishers 5% for connecting to third party exchanges,**
  - **they don't share floors or data with third party exchanges so they are less competitive, and**
  - **they increasingly restrict us from fulfilling demand via DBM and Adwords**

TOOLS IN GOOGLE'S ANTICOMPETITIVE TOOLBOX:

BUY-SIDE MONOPOLY

Confidential - The Rubicon Project, Inc. 2019

33

DBM Dominates the Buy Side

- Google had no real position in Brand advertising in 2010.
- But YouTube required brand buyers -- DBM was born (via Invite Media acquisition)
- Google then froze other buyers out of YouTube inventory, forcing all brands to use DBM. For many, having two DSPs was too difficult, hence a monopoly position was born…..
- DBM forces extreme terms on exchanges
- Strong evidence that DBM throttles exchanges and keeps spend constant on purpose

Confidential - The Rubicon Project, Inc. 2019

34

As Google Restricts YouTube, DBM Grows

DBM Ad Spend

Google restricts access to YouTube via DBM or AdWords

Google launches "Enhanced" Dynamic Allocation

Google launches Exchange Bidding

Confidential - The Rubicon Project, Inc. 2019

35
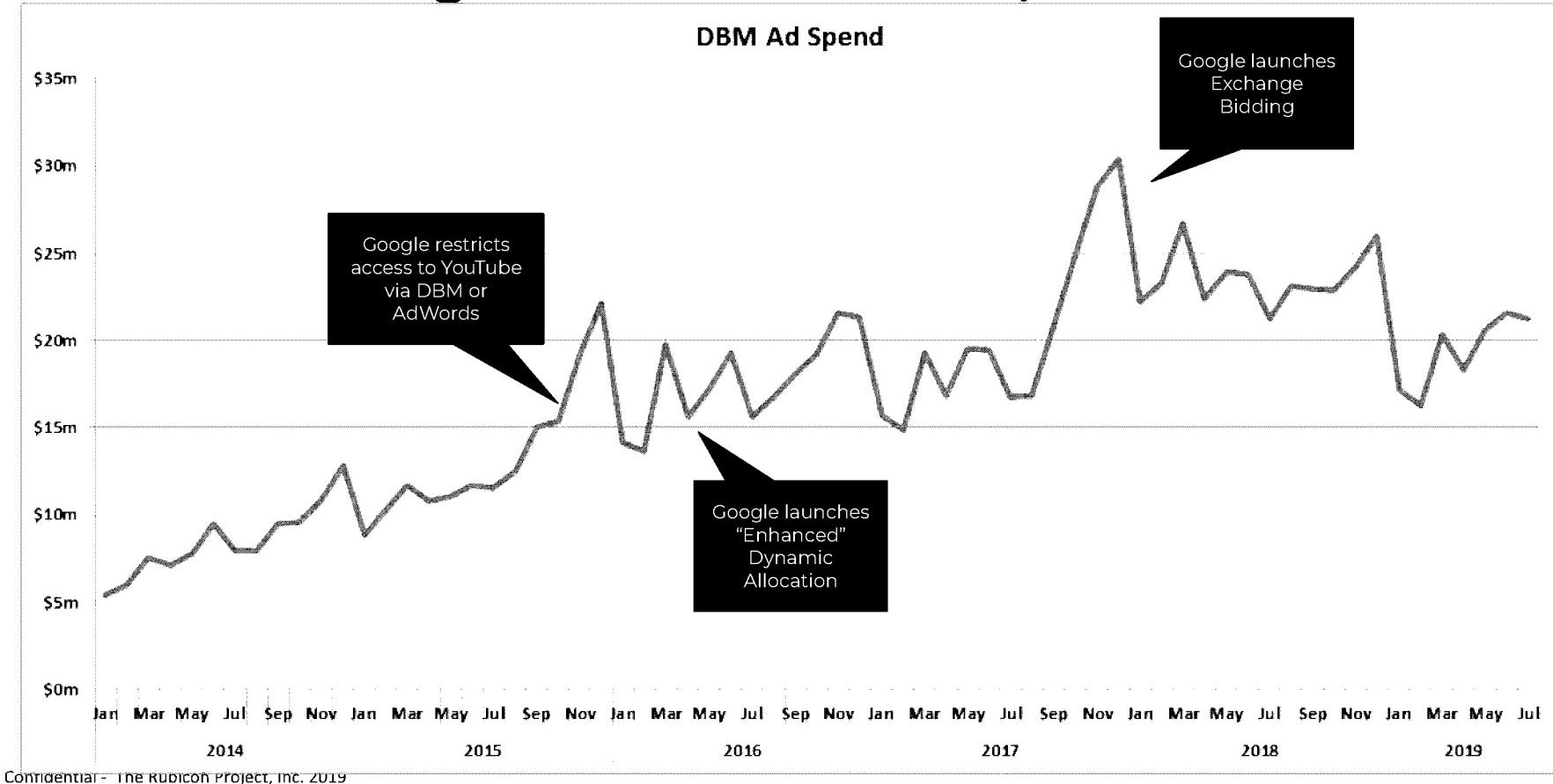
DBM Dominates Rubicon Ad Spend

Confidential - The Rubicon Project, Inc. 2019

36
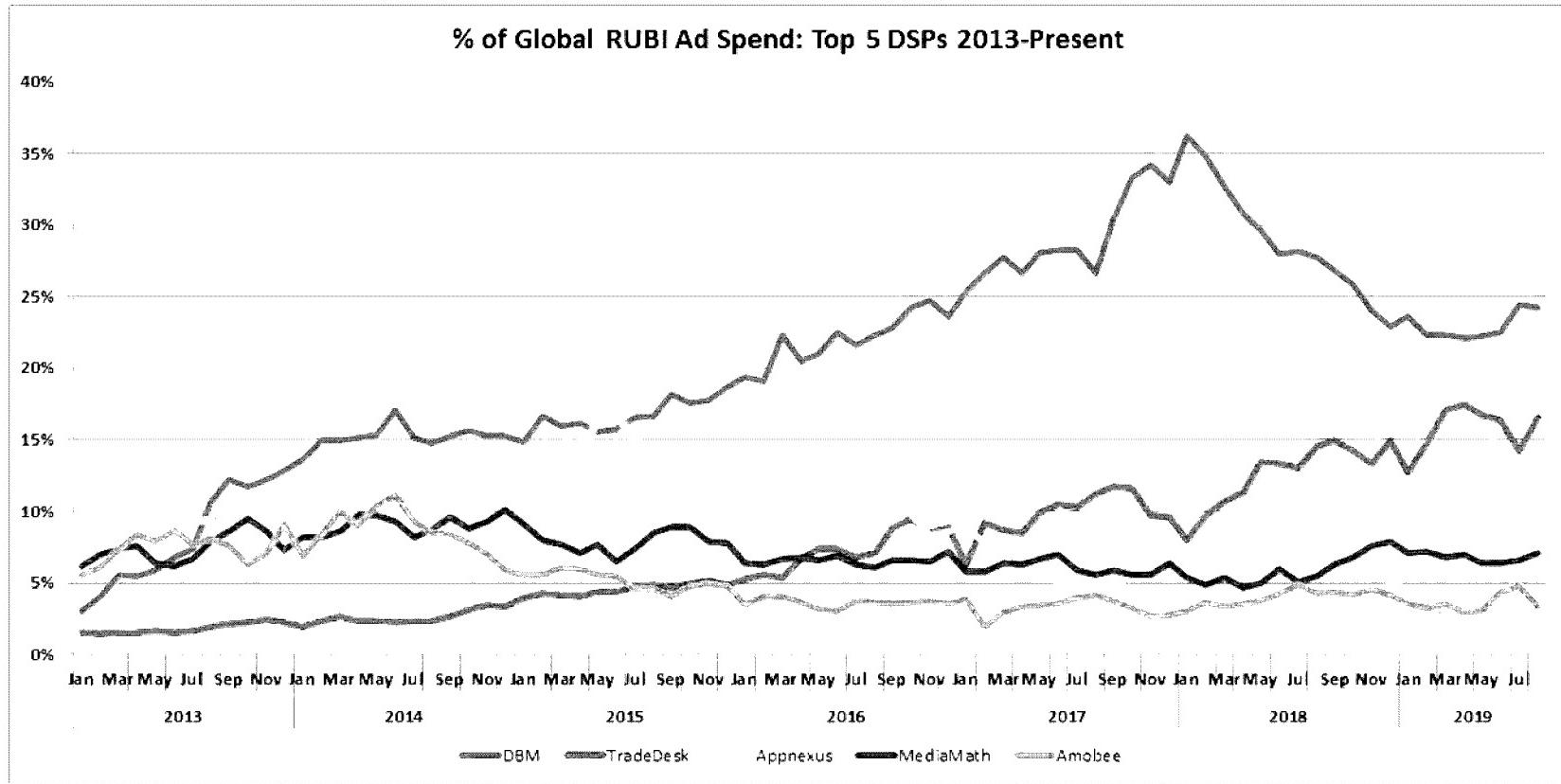
DBM spend has been incredibly consistent the past 20 months

37
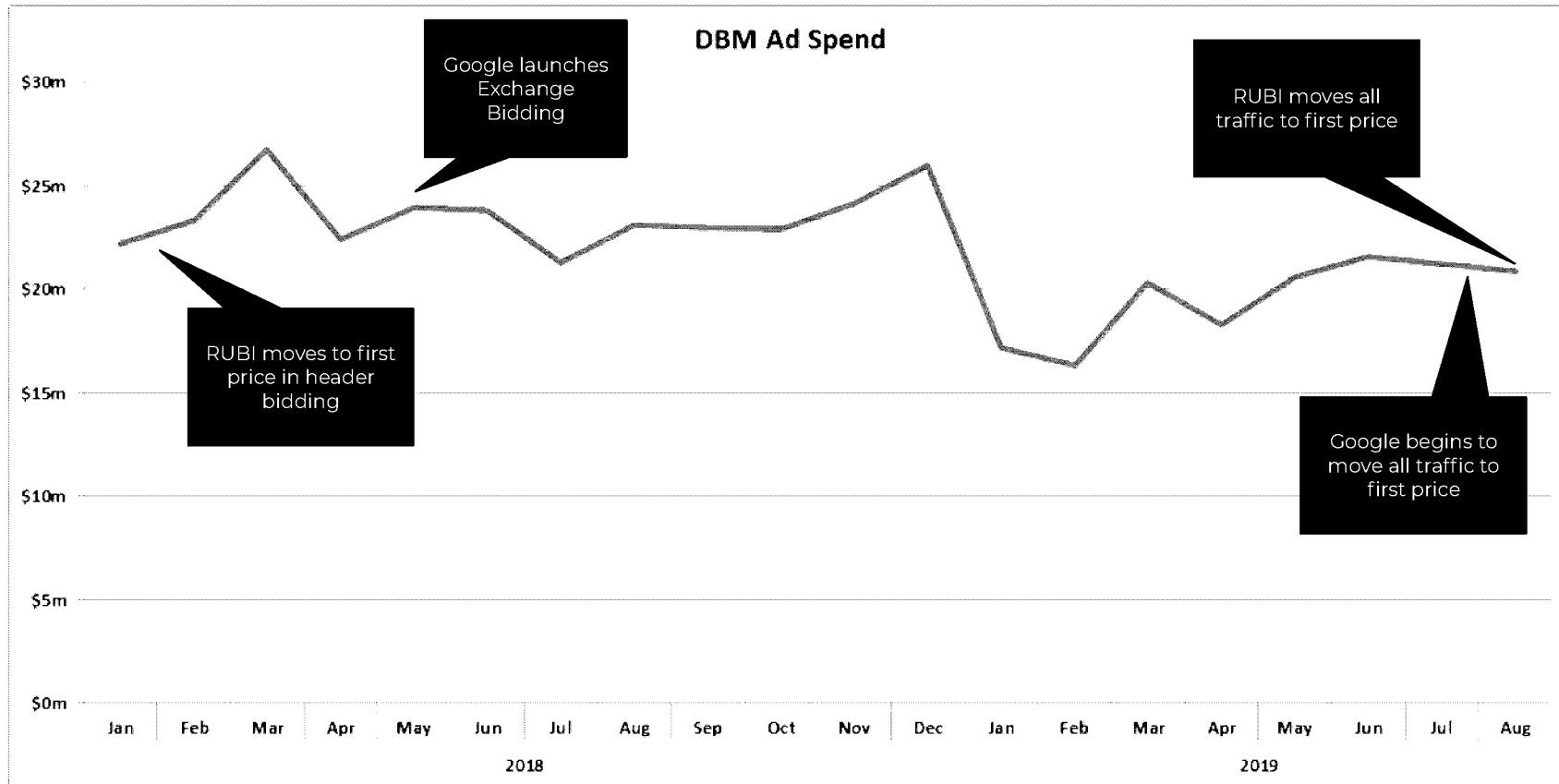
Onerous Financial & Contract Terms

Google (DBM) → **Rubicon Project** → **Google (EB)** → **Publishers**

Google determines what it pays us. (Limited reporting provided.)

Google determines what we pay them. (No reporting provided.)

Google takes a fee from publisher. (If impression is sold via AdX (instead of RP) no fee applied).
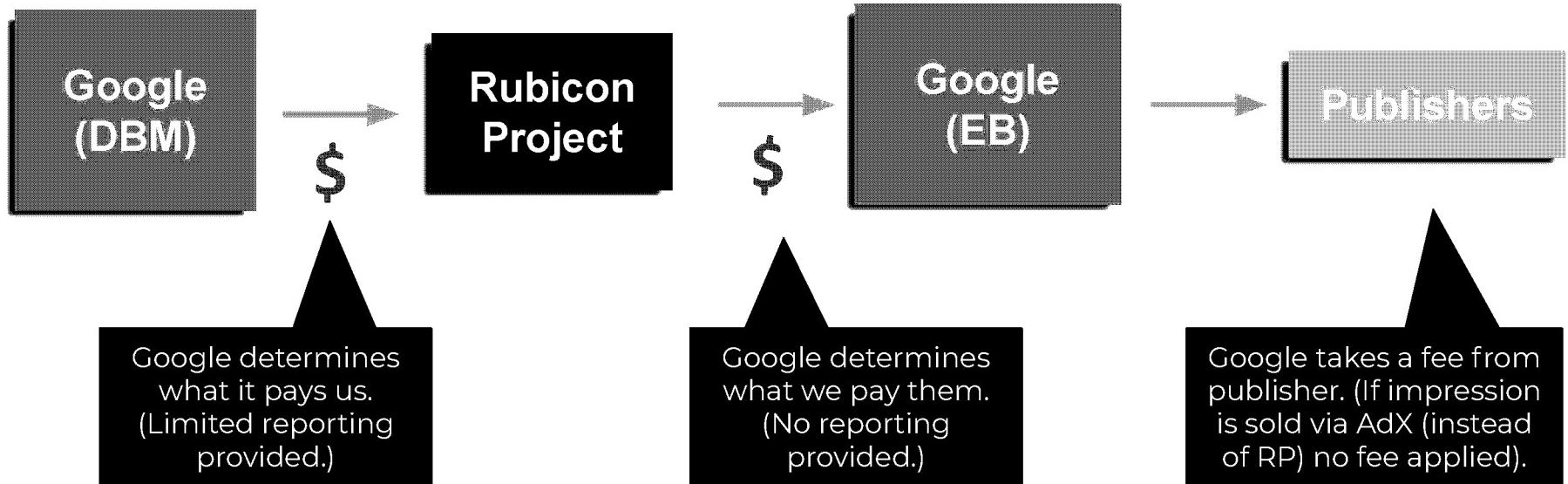
No visibility into whether we are paying Google EB for amounts DBM withheld from us.

Confidential - The Rubicon Project, Inc. 2019

38

Rubicon Project must accept Google metrics, resulting in ~$8.8M net benefit to Google since January 2018

	EB Inventory Discrepancies (Sell Side)				DBM & DBM2 Spend Discrepancies (Buy Side)					Net Impact to Rubicon
	Rubicon Number	Google Number	Total Variance $	Adjusted Variance	DBM Discrepancy	DBM 2 Discrepancy	Total Discrepancy	DBM & DBM2 IVT	Total Disc & IVT	
Jan-18	($1,012)	($1,024)	($12)	**($12)**	$0	($503)	**($503)**	($228)	**($731)**	**($743)**
Feb-18	($1,165)	($1,183)	($18)	**($18)**	$0	($496)	**($496)**	($290)	**($786)**	**($804)**
Mar-18	($3,268)	($3,314)	($46)	**($46)**	$0	($651)	**($651)**	($335)	**($986)**	**($1,033)**
Apr-18	($5,155)	($5,268)	($113)	**($113)**	$0	($273)	**($273)**	($206)	**($479)**	**($592)**
May-18	($7,096)	($7,241)	($146)	**($146)**	$0	($291)	**($291)**	($155)	**($446)**	**($591)**
Jun-18	($8,209)	($8,477)	($268)	**($268)**	$0	($250)	**($250)**	($145)	**($395)**	**($663)**
Jul-18	($8,574)	($8,956)	($381)	**($292)**	$0	($277)	**($277)**	($126)	**($403)**	
Aug-18	($9,523)	($9,944)	($420)	**($321)**	$0	($269)	**($269)**	($133)	**($40?)**	**($722)**
Sep-18	($10,256)	($10,613)	($357)	**($251)**	$0	($260)	**($260)**	($117)	**($?77)**	**($628)**
Oct-18	($10,475)	($10,557)	($82)	**($82)**	$0	($175)	**($175)**		**($322)**	**($404)**
Nov-18	($12,636)	($12,600)	$36	**$36**	$0	($194)	**($194)**	($139)	**($333)**	**($297)**
Dec-18	($16,208)	($16,143)	$64	**$64**	$0	($229)	**($229)**	($213)	**($442)**	**($378)**
-19	($11,387)	($11,335)	$52	**$52**	$0	($229)	**($229)**	($95)	**($325)**	**($273)**
Fe-	($10,774)	($10,713)	$61	**$61**	$0	($185)	**($185)**	($63)	**($248)**	**($187)**
Mar-19	(?5,016)	($14,867)	$150	**$150**	$0	($179)	**($179)**	($92)	**($271)**	**($121)**
Apr-19	($14,?)	($14,326)	$97	**$97**	$0	($164)	**($164)**	($90)	**($253)**	**($157)**
May-19	($17,378)	(?7,289)	$90	**$90**	$98	($151)	**($53)**	($96)	**($149)**	**($60)**
Jun-19	($18,589)	($18,48?)	$101	**$101**	$78	($166)	**($88)**	($91)	**($179)**	**($77)**
Jul-19	($17,768)	($17,705)	$63	**$63**	($89)	($173)	**($262)**	($188)	**($450)**	**($387)**
TOTAL	**($198,913)**	**($200,042)**	**($1,129)**	**($834)**	**$86**	**($5,112)**	**($5,026)**	**($2,950)**	**($7,976)**	**($8,810)**

RUBI has paid out ~$800k more to EB publishers than our systems have counted

Google changes counting methodology, does not provide historical credit

Between counting methodology and IVT claims Google has short paid RUBI ~8M

$ in 000s. In June, July, and August 2018 Rubicon and Google agreed to split the EB adjusted variance amount over 2%

TOOLS IN GOOGLE'S ANTICOMPETITIVE TOOLBOX:

CLOUD INFRASTRUCTURE

Confidential - The Rubicon Project, Inc. 2019

40

# Latency plays an important role in digital advertising markets

- In the ad tech industry, latency is incredibly important
- You have about 100 milliseconds to collect bids, choose a winner, and serve the ad
- If an exchange can't get bids in time from advertisers, it literally times out -- and cannot bid at all

Confidential - The Rubicon Project, Inc. 2019

41

Google's latency is ~2x higher than other top buyers on Rubicon's exchange

US West - DSP Response Times (pct 75)
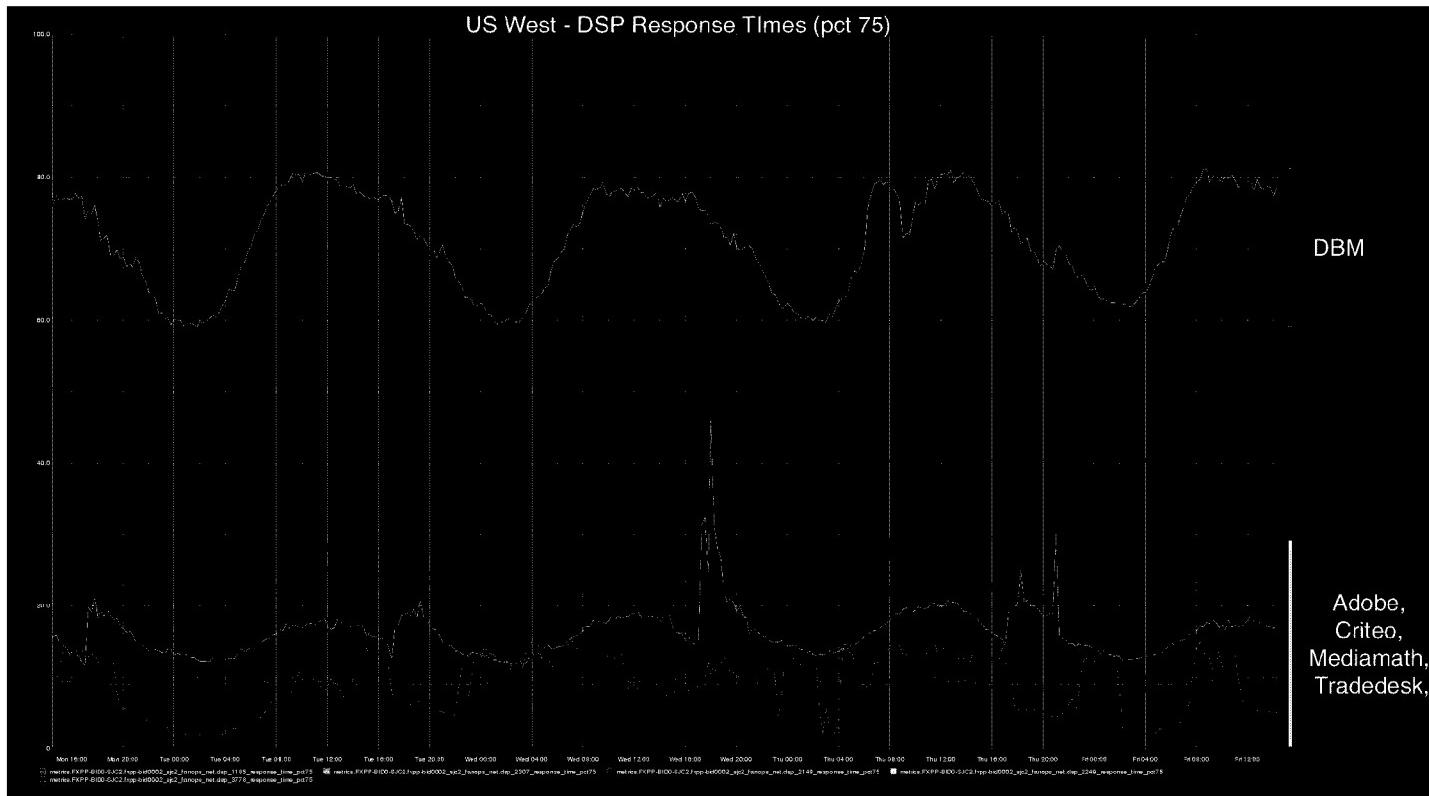
High latency negatively impacts win rate
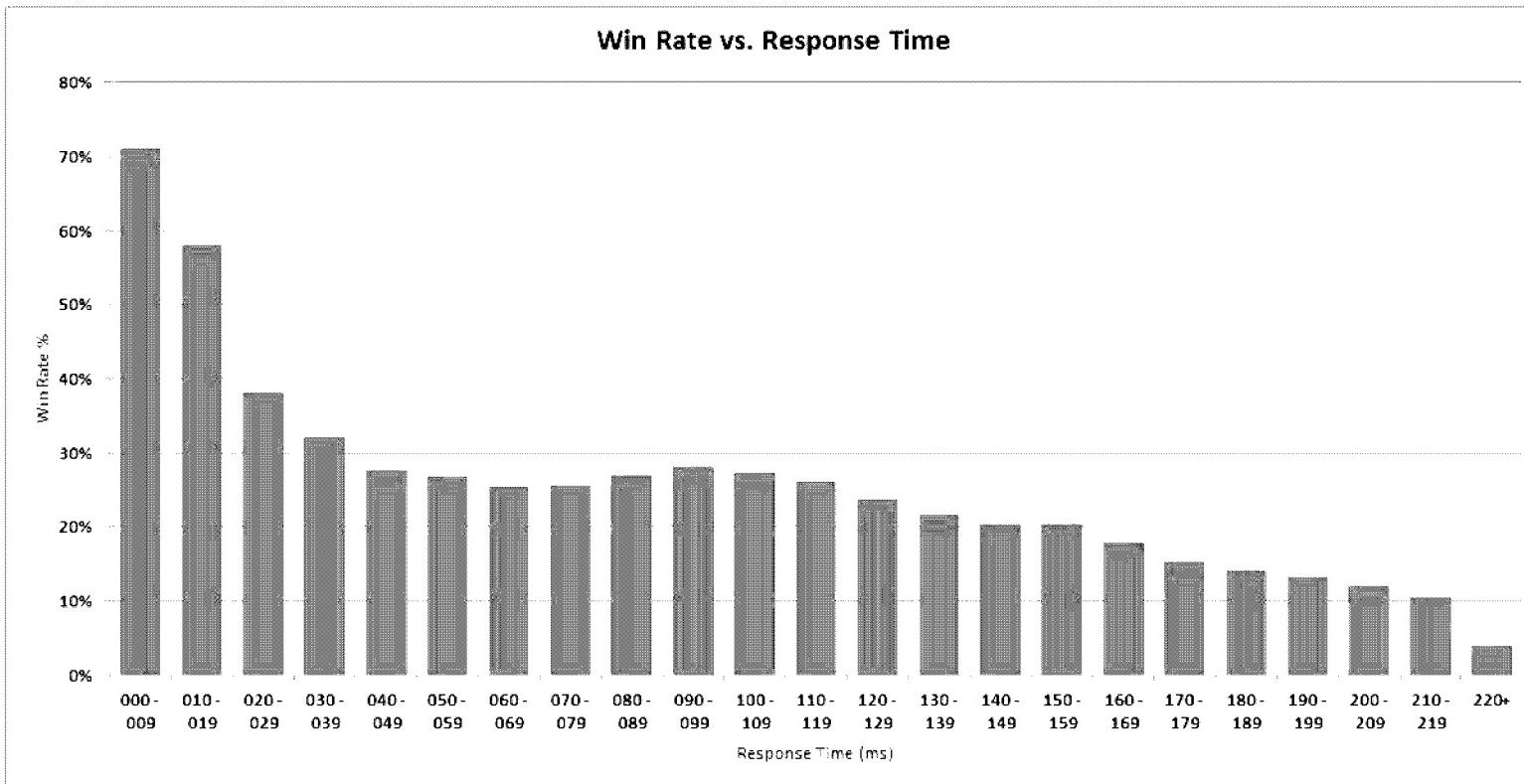
Data for EB only, not normalized for bid price

43

Google's DSP has latency issues with other exchanges, but not AdX

- Google's DSP, DoubleClick Bid Manager, has extremely high latency—it can be up to twice as slow to submit a bid as other DSPs
- When DBM submits a bid for AdX inventory, however, it is much faster, partially because their servers share the same footprint
- The result is that DBM bids on AdX inventory are faster (and more likely to be successful) than DBM bids on third-party exchanges, which has two consequences:
  1. More DBM demand gets funneled into AdX
  2. Competing exchanges miss out on DBM demand, making them less attractive to publishers
- The only solution Google offers is to use its cloud, which it claims will allow an exchange to receive faster DBM bids
- But moving to the Google cloud would make competing exchanges even more heavily exposed to Google, and at existential risk if Google decides to increase price or throttle performance

Confidential - The Rubicon Project, Inc. 2019

44

Google's solution to its latency issue is to force SSPs to pay for their cloud services

- Google promises 30-50% improvement in latency if we use their cloud services
- This amounts to ~$25M per year we would have to give Google in order to compete for their demand
- Google's own results (below) of 30-day test showed an incremental increase in $1-2M in RUBI revenue:

EB Metrics

Sample Size: 30 Days
Auctions Won: 21B
Win Rate: 39.5%
HTTP Timeouts: 0.09%

Available Impressions	Inventory Matches	Bid Requests	HTTP Timeout Rate	Successful Responses	Bids in Auction	% in Auction	Auctions Won	Win Rate	Additional Auctions With GCP	Google's Estimate of Add'l Annual RUBI Revenue
662,000,000,000	604,000,000,000	670,000,000,000	0.009	663,970,000,000	53,900,000,000	0.08117836649	21,290,500,000	39.5%	-	-
662,000,000,000	604,000,000,000	670,000,000,000	0.007	665,310,000,000	54,008,779,011	0.0811783665	21,333,467,709	39.5%	42,967,709	-
662,000,000,000	604,000,000,000	670,000,000,000	0.005	666,650,000,000	54,117,558,022	0.0811783665	21,376,435,419	39.5%	85,935,419	$1,083,818
662,000,000,000	604,000,000,000	670,000,000,000	0.003	667,990,000,000	54,226,337,033	0.0811783665	21,419,403,128	39.5%	128,903,128	$2,300,921

45

Summary

- Through its DSP, Google controls access to a critical source of demand
- Due to high latency issues, Google's DSP does not effectively interoperate with non-Google ad exchanges
- Instead of solving this problem, Google invites other exchanges to use its cloud infrastructure
- But that would only give Google even more control over its rivals, and the ability to crush their businesses
- The choice is: "Make your company even more vulnerable to Google, or continue missing out on demand from the most important DSP"

Confidential - The Rubicon Project, Inc. 2019

46

Thank you!